



ICAO

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
WESTERN AND CENTRAL AFRICA OFFICE**

**Ninth Meeting of the CAFSAT Network Management Committee (CNMC/9)
Luanda, Angola, 3-4 June 2019**

Agenda Item 2: Review the performance of CAFSAT earth stations and the operational statistics of availability for supported links

PERFORMANCE OF CAFSAT LISBON AND SANTA MARIA STATIONS.

(Presented by Portugal)

SUMMARY

**This Working Paper reports the performance of Lisbon and Santa Maria
CAFSAT components MTBF and MTTR for levels 1, 2 and 3**

Reference: CNMC/8 – Conclusion 8/05

1. INTRODUCTION:

In Portugal there are two CAFSAT stations to support the AFS (AFTN and ATS/DS), AMS, Radar data and OLDI communication as follows:

Lisbon station:

AFTN - 1 circuit with Santa Maria
ATS/DS - 2 circuits with Santa Maria
AMS - 1 circuit with Casablanca (Agadir)
OLDI - 1 circuit with Casablanca (Agadir)
Radar data - 2 circuits with Casablanca (Agadir)

Lisbon station has 3 links: Casablanca (Agadir), Canary (not operational yet) and Santa Maria.

Santa Maria station:

AFTN - 1 circuit with Lisbon and 1 circuit with Sal.
ATS/DS - 2 circuits with Lisbon, 1 circuit with Sal and 1 circuit with Canary.
OLDI - 1 circuit with Sal and 1 circuit with Canary.

Santa Maria station has 3 links: Canary, Lisbon and Sal.

This Working Paper reports the performance (MTBF and MTTR) of both stations during 2018.



2. DISCUSSION

The MTBF and MTTR values of Lisbon and Santa Maria during 2018 are:

Lisbon link with:	MTBF (H)			MTTR (H)		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Casablanca	≥ 8760	≥ 8760	≥ 8760	≤ 0.5	≤ 0.5	≤ 0.5
Canary	≥ 8760	≥ 8760	≥ 8760	≤ 0.5	≤ 0.5	≤ 0.5
Santa Maria	≥ 8760	≥ 8760	≥ 8760	≤ 0.5	≤ 0.5	≤ 0.5

Santa Maria link with:	MTBF (H)			MTTR (H)		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Canary	8760	8760	973	.1	.65	1.24
Lisbon	≥ 8760	≥ 8760	≥ 8760	≤ 0.5	≤ 0.5	≤ 0.5
Sal	8760	2190	1251	.1	1.58	.63

Notes: Level 1 – Outdoor equipment (BUC and LNB) and space segment.

Level 2 – Indoor equipment (Modems).

Level 3 – Base band equipment (multiplexers, swicht and interface units).

Above mentioned values are good and proves that CAFSAT network is a very positive contribution to the aeronautical communications in this area.

3. ACTION BY THE MEETING:

The meeting is invited to note the information of this WP.

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